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Sut	ostitute for form 1449A-P1	,	70 200s	Application No.	10/642,807	
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STA	RMATION D	VE VSV		First Named Inventor	Lewis et at.	
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	(Use as many sheets	as nec	essary)	Examiner Name	Peselev	
Sheet	1	of	5	Attorney Docket No.	892,280-602 (formerly 342312004900)	

	U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.1	Document No. Number-Kind Code <sup>2 (N known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
91	1.	2,851,463	09/09/1958	Hinman et al.			
4	2.	2,928,844	03/15/1960	De Boer et al.			
4	3.	3,255,174	06/07/1966	Bannister et al.			
51	4.	3,268,556	08/23/1966	Hoeksema	,		
4	5.	3,282,917	11/01/1966	Magerlein	•		
Gp .	6.	3,361,739	01/02/1968	Argoudelis et al.			
4	7.	3,364,197	01/16/1968	Hoeksema			
4	8.	3,380,992	04/30/1968	Argoudelis et al.			
4	9.	3,435,025	05/25/1969	Birkenmeyer			
4	10.	3,539,689	11/10/1970	Birkenmeyer et al.			
4	11.	3,549,615	12/22/1970	Birkenmeyer			
4	12.	3,555,007	01/12/1971	Magerlein			
4	13.	3,702,322	11/07/1972	Bannister			
Ý.	14.	3,817,979	06/18/1974	Argoudelis et al.			
4	15.	3,856,943	12/24/1974	Birkenmeyer			
4	16.	3,892,729	07/01/1975	Birkenmeyer .			
4	17.	3,892,730	07/01/1975	Birkenmeyer			
4	18.	4,293,547	10/06/1981	Lewis et al.			
		, -			·		

	FOREIGN PATENT DOCUMENTS								
Examiner Cite		Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	T6			
Initials*	No.'	Country Code <sup>3</sup> Number <sup>4</sup> Kind Code (if known)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	•			
4	19.	EP 0161 794	11/21/1985	The Upjohn Company					
4	20.	GB 1 298 295	11/29/1972	The Upjohn Company					
4	21.	GB 1 347 598	02/27/1974	The Upjohn Company					
4	22.	WO 89/04672	06/01/1989	The Upjohn Company					

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	(Use as many sheets	as nec	essary)	Examiner Name	Peselev	
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Initials*	Initials* No.3 Country Code3 Number4 Kind Code		WW-DD-XXXX	Applicant of Cited Document	or Relevant Figures Appear	•		
8	23.	WO 2004/016632	02/26/2004	Vicuron Pharmaceuticals Inc.				
4	24.	.WO 2005/012320	02/10/2005	Vicuron Pharmaceuticals Inc.				
4	25.	WO 2005/007665	01/27/2005	Vicuron Pharmaceuticals Inc.				

	NON PATENT LITERATURE DOCUMENTS					
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4	26.	Alexander, J. et al. (1988) "(Acyloxy)alkyl Carbamates as Novel Bioreversible Prodrugs for Amines: Increased Permeation through Biological Membranes," JOURNAL OF MEDICINAL CHEMISTRY 31(2): 318-22.				
5	27.	Alexander, J. et al. (1996) "Investigation of (Oxodioxolenyl)methyl Carbanates as Nonchiral Bioreversible Prodrug Moieties for Chiral Amines," JOURNAL OF MEDICINAL CHEMISTRY-39(2): 480-86.				
4	28.	Corrected version of International Search Report mailed on July 26, 2004, for International Application PCT/US03/25820 filed on August 15, 2003				
4	29.	International Search Report mailed on May 6, 2005, for PCT Patent Application PCT/US2004/019497 filed on June 17, 2004, 7 pages				
4	30.	International Search Report mailed on August 8, 2005, for PCT Patent Application PCT/US2004/019689 filed on June 17, 2004, 21 pages				
4.	31.	Baldwin, J.E. et al. (1990) "Stereospecific Synthesis of Dealanylalahopein," TETRAHEDRON 46 (13/14): 4733-48.				

NB1:662843. 2Examiner Signature	a Kale	Date Considered	1011/95

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8	32.	Bannister, B. et al. (1980) "The S-Alkylation of Sulphides by an Activated Carbohydrate Epimine Under Acidic Catalysis: the Formation of α-Acetamido-sulphides. Part 4. Reactions with Dithioacetals and Monothioacetals" JOURNAL OF THE CHEMICAL SOCIETY, PERKINS TRANSACTIONS 1 2:540-552	
4	33.	Bannister, B. et al. (1987) "The S-Alkylation of Sulphides by an Activated Carbohydrate Epimine Under Acidic Catalysis: the Formation of α-Acetamido-sulphides. Part 5. The Introduction of Functionality into the Sulphide Substituent" J. CHEM. RES. 4:701-94	
4	34.	Bannister, B. et al. (1989) "The S-Alkylation of Sulphides by an Activated Carbohydrate Epimine Under Acidic Catalysis: the Formation of α-Acetamido-sulphides. Part 5. The Introduction of Functionality into the Sulphide Substituent" JOURNAL OF CHEMICAL RESEARCH 4:90-91	
4	35.	Bousquet, Y. et al. (1997) "Preparation of Enantiopure 4-Oxygenated Pipeolic Acid Derivatives," TETRAHEDRON 53(46): 15671-15680.	
8	.36.	Bundgaard, H. et al. (1980) "Prodrugs as Drug Delivery Systems IV: N-Mannich bases as Potential Novel Prodrugs for Amides, Ureide, Amines, and Other NH-Acidic Compounds," JOURNAL OF PHARMACEUTICAL SCIENCES 69(1): 44-46.	
4	37.	Deiters, A. et al. (2004) "Synthesis of Oxygen- and Nitrogen-Containing Heterocycles by Ring-Closing Metathesis" CHEM. REV. 104: 2199-2238.	
4	38.	Del Valle, J.R. et al. (2003) "Asymmetric Hydrogenations for the Synthesis of Boc- Protected 4-Alkylprolinols and Prolines," JOURNAL OF ORGANIC CHEMISTRY 68(10): 3923- 31.	
Ç	39.	Dondoni, A. et al. (1997) "Stereoselective Addition of 2-Furyllithium and 2-Thiazolyllithium to Sugar Nitrones. Synthesis of Carbon-Linked Glycoglycines." JOURNAL OF ORGANIC CHEMISTRY 62(16): 5484-96.	
8	40.	Dondini, A. (1994) "Synthesis of N-Benzyl Nitrones" SYNTHETIC COMMUNICATIONS 24(18):2537-50.	

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Signature	rrace		Considered	2017/08

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4	41.	Flaherty, P. et al. (1996) "Synthesis and Selective Monoamine Oxidase B-Inhibiting Properties of 1-Methyl-2,3,6-Tetrahydropyrid-4-yl Carbomate Derivatives: Potential Prodrugs of (R)- and (S)-Nordeprenyl," JOURNAL OF MEDICINAL CHEMISTRY 39(24): 4756-61.					
4	42.	Fukuyama, T. et al. (1995) "2- and 4-Nitrobenzenesulfonamides: Exceptionally Versatile Means for Preparation of Secondary Amines and Protection of Amines." TETRAHEDRON LETTERS 36(36): 6373-74.					
4	43.	Griffith, W.P. et al. (1990) "TPAP: Tetra-n-propylammonium Perruthenate, A Mild and Convenient Oxidant for Alcohols." ALDRICHIMICA ACTA 23(1): 13-19.					
4	44.	Ibatullin, F.M. et al. (2002) "Reaction of 1,2-trans-glycosyl acetates with phosphorus pentachloride: new efficient approach to 1,2-trans-glycosyl chlorides" TETRAHEDRON LETTERS 43: 9577-9580.					
4	45.	Jensen, N.P. et al. (1980) "Use of Aceylacetone to Prepare a Prodrug of Cycloserine," JOURNAL OF MEDICINAL CHEMISTRY 23(1): 6-8.					
-4	46.	Magerlein, B.J. et al. (1969) "Lincomycin. VIII. 4'-Alkyl-1'-demethyl-4'-depropylclindamycins, Potent Antibacterial and Antimalarial Agents" JOURNAL OF MEDICINAL CHEMISTRY 12: 780-84.					
٠,٧	47.	Magerlein, B.J. (1967) "Lincomycin. VII. 4'-depropyl-4'-ethoxylincomycins" JOURNAL OF MEDICINAL CHEMISTRY 10(6): 1161-63.					
ζ, .	48.	Misiek, M. et al. (1973) "Microbiological Properties of a New Cephalosporin, BL-S 339: 7-(Phenylacetimidoyl-aminoacetamido)-3-(2-Methyl-1,3,4-Thiadiazol-5-Ylthiomethyl)Ceph-3-em-4-Carboxylic Acid" ANTIMICROBIAL AGENTS AND CHEMOTHERAPY 3(1):40-48.					
4	49.	Myers, A.G. et al. (1999) "Greatly Simplified Procedures for the Synthesis of α-Amino Acids by the Direct Alkylation of Pseudoephedrine Glycinamide Hydrate" J. ORG. CHEM. 64: 3322-27.					
4	50.	Osuch, C. et al. (1956) "The Use of Organolithium Compounds to effect the Alkylation of 2- and 4-Picoline" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 78:1723-25.					

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51	51.	Sakamoto, F. et al. (1984) "Studies on Prodrugs. II. Preparation and Characterization of (5-Substituted 2-Oxo-1,3-Dioxolen-4-yl)methyl Esters of Ampicillin" CHEM. PHARM. BULL. 36(6): 2241-48.	, -
Ç	52.	Shek, E. et al. (1976) "Improved Delivery Through Biological Membranes. 2. Distribution, Excretion, and Metabolism of N-Methyl-1,6-dihydropyrident-2-Carbaldoxime Hydrochloride, A Pro-drug of N-Methylpyridinium-2-Carbalkdoxime Chloride" JOURNAL OF MEDICINAL CHEMISTRY 19(1):108-12.	
P	53.	Spĺžek, J. et al. (2004) "Lincomycin, Cultivation of Producing Strains and Biosynthesis" APPL. MICROBIOL. BIOTECHNOL. 63:510-19.	
4	54.	Sztaricskai, F. et al. (1996) "Semisynthetic Modification of Antibiotic Lincomycin" J. ANTIBIOTICS 49(9): 941-43.	
G	55.	Sztaricskai, F. et al. (1997) "Chemical Synthesis and Structural Study of Lincomycin Sulfoxides and a Sulfone" J. ANTIBIOTICS 50(10): 866-73.	
4	56.	Sztaricskai, F. et al. (1999) "Structural Modification of the Lincomycin Antibiotic" J. ANTIBIOTICS 52(11): 1050-55.	
4	57,.	Watanabe, T. et al. (1982) "Synthesis of α-Amino-cycloheptatriene-1-acetic Acids and Their 7-Acylaminocephalosporin Derivatives" CHEMICAL PHARMACEUTICAL BULLETIN 30(7): 2579-82.	
4.	58.	Weiss, W.J. et al. (1999) "In vivo Activities of Peptidic Prodrugs of Novel Aminomethyl Tetrahydrofuranyl-1β-Methylcarbapenems" ANTIMICROBIAL AGENTS AND CHEMOTHERAPY 43(3): 460-64.	
Ġ	59.	Yong, K. et a I. (2001) "Studies on the Alkylation of 3-Methyl-3-buten-1-ol Dianion: An Efficient Synthesis of 3-Methylene-1-alkanols Including a San Jose Scale Sex Phereomone" JOURNAL OF ORGANIC CHEMISTRY 66(24): 8248-51.	

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